REMARKS

The Office Action of November 12, 2008, has been carefully reviewed, and in view of the above amendments and the following remarks, reconsideration and allowance of the pending claims are respectfully requested.

In the above Office Action, claims 1, 2, 4, 5, 10, 12-14 and 26-32 were rejected under 35 U.S.C. § 102(e) as being anticipated by Skujins et el. (U.S. Patent Publication No. 2003/0069520) in view of Ishida (U.S. Patent No. 6,328,822). Claims 3, 6-9, 11 and 15-25 stand withdrawn as being directed to a non-elected species.

The primary reference upon which the Examiner relies, Skujins, discloses various embodiments for connecting different guidewire sections together. The embodiment of Figs. 1-3 to which the Examiner refers discloses proximal and distal guidewire sections 14, 16 joined together by a connector tube 18, as set forth in the Official Action on Page 3, Item 6.

Yet, with respect to the further claim language reciting relative weight ratios of the first metallic material and the second metallic material increasing and decreasing along the length, respectively, and the distal end of the intermediate portion being joined to a terminal end of the proximal end of the distal end side portion and the proximal end of the intermediate portion being joined to a terminal end of the distal end of the proximal end side portion such that the distal end side portion and the proximal end side portion *do not overlap*, the Examiner appears to rely upon the embodiment of Skujins shown in Fig. 4.

Applicants respectfully disagree with the above application of the prior

art to the claimed invention. It appears that the Examiner is attempting to combine the embodiments of Figs. 1-3 with the embodiment of Fig. 4 of Skujins in order to satisfy the above noted claim recitations. However, as the Examiner will appreciate, these different embodiments are mutually exclusive with respect to meeting the language of the recited claim. That is, if the teaching of the Fig. 4 embodiment is applied to the embodiment of Figs. 1-3, then the surface contact of guidewire sections 14, 16 at the overlapping joint 12 would be destroyed. As cautioned by the Federal Circuit, where a modification of the prior art device would render such device inoperable for its intended purpose, the mere fact that the prior art device could be so modified would not have made the modification obvious. In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984). Applicants respectfully contend this is an analogous situation wherein, when modification of a first embodiment in view of another embodiment destroys the teaching relied upon in the first embodiment, said modification can not be said to be obvious.

Further, as recognized by the Examiner, Skujins does not disclose that "the intermediate portion comprises an integral gradient composition portion having a predetermined length in which a weight ratio of the first metallic material in the metallic mixture decreases and a weight ratio of the second metallic material in the metallic mixture increases along the length of the intermediate portion, from the distal end side portion towards the proximal end side portion." Office Action, Page 5, Item 9.

In addition, as set forth above, independent claims 1, 13 and 14 have been further amended to recite an "intermediate portion comprising a sintered cylindrical

body formed of a powder of said first metallic material and a powder of said second metallic material." Independent claim 12 also recites a similar feature. Applicants respectfully contend that this feature is not suggested by a combination of the cited prior art.

The primary reference, Skujins, discloses the following construction parameters for connector 18:

> **[0023]** Some types of alloys are particularly suitable for connector 18 for purposes of connecting a stainless steel proximal section 14 and a nickel titanium alloy distal section 16, or visa-versa. An example is a nickel-chromium-iron alloy available under the trade name INCONEL 625, which advantageously welds to both stainless steels and nickel-titanium alloys. INCONEL 625 may be obtained from California Fine Wire Company of Grover Beach, Calif., and has the following composition: ...
> **[0024]** Another example of a suitable alloy which welds to both stainless steels and nickel-titanium alloys is available under the trade name ALLOY C276 from Fort Wayne Metals Research Products Corporation of Fort Wayne, Ind., which has the following composition: ...

Thus, it is clear that Skujins does not provide the teaching for an intermediate portion comprising a sintered cylindrical body formed of a powder of said first metallic material and a powder of said second metallic material, as recited in each of the independent claims.

Ishida, the secondary reference relied upon the Examiner, is directed to a copper-based, functionally graded alloy having uniform composition and diameter and continuously or stepwise changing properties such as hardness, modulus elongation, etc. Col. 1, lines 6-9. Ishida further discloses the following regarding functionally graded alloys in Col. 1, lines 12-40:

> Functionally graded alloys are materials having continuously or stepwise changing properties such as hardness, elasticity, thermal conductivity, electric conductivity, etc. without gradient in size given by mechanical working such as cutting, etc. or chemical treatments such as etching, etc. Functionally graded materials developed so far are mostly such two-component composites as SiC/C, ZrO/W, TiC/Ni, ZrO/Ni, etc., which have gradually changing mixing ratios.
>
> Conventional functionally graded materials having gradually changing mixing ratios have been produced by mixing different material powders at gradually changing mixing ratios to prepare a plurality of mixed powder sheets having gradually changing mixing ratios, laminating the mixed powder sheets along the gradually changing mixing ratios, compacting and sintering them. For example, Japanese Patent Laid-Open No. 5-278158 discloses a functionally graded, binary metal material produced by laminating and sintering W powder and Mo powder at a gradually changing mixing ratio. (Emphasis added)
>
> However, the functionally graded materials produced by such a method cannot be rolled or drawn, and they can be formed to desired shapes only by cutting. Thus, they are not only very expensive but also cannot be formed into complicated shapes. Accordingly, the conventional functionally graded materials are used mainly in highly expensive applications, such as spacecraft, nuclear power generators, etc. (Emphasis added).

The above description in Ichida relates to a plurality of mixed powder sheets, as opposed to the sintered cylindrical body formed of a powder of the first metallic material and a powder of the second metallic material, as recited in the present claims. Moreover, as set forth in the description in the last paragraph quoted above, it is clear that the possibility of using the teaching of Ichida for a guide wire in accordance with the claimed invention would not be possible. That is, a material that can only be formed to a desired shape by cutting clearly teaches away from it being used in the guidewire of Skujins. Further, Ishida does not disclose or suggest

providing a functionally graded material as an intermediate portion between two materials such as stainless steels and nickel-titanium alloys.

Newly added claim 33 is supported by the following description in the specification on Page 24, lines 5-10:

> in addition, the metallic powder charging step is preferably conducted in such a manner that a second metallic member 30a formed of a second metallic material is placed on one side in the mold, while a first metallic member 30k formed of a first metallic material is placed on the other side in the mold, and the above-mentioned charge is pressed between the metallic members.

Applicants respectfully submit that claim 33 also is not rendered obvious by the cited prior art.

CONCLUSION

In view of the above amendments and remarks, Applicants respectfully submit that the claims of the present application are now in condition for allowance, and an early indication of the same is earnestly solicited.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference would be helpful in resolving any remaining issues pertaining to this application; the Examiner is kindly invited to call the undersigned counsel for Applicants regarding the same.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: April 13, 2009 By: Wendi Weinstein

Wendi L. Weinstein
Registration No. 34456

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620